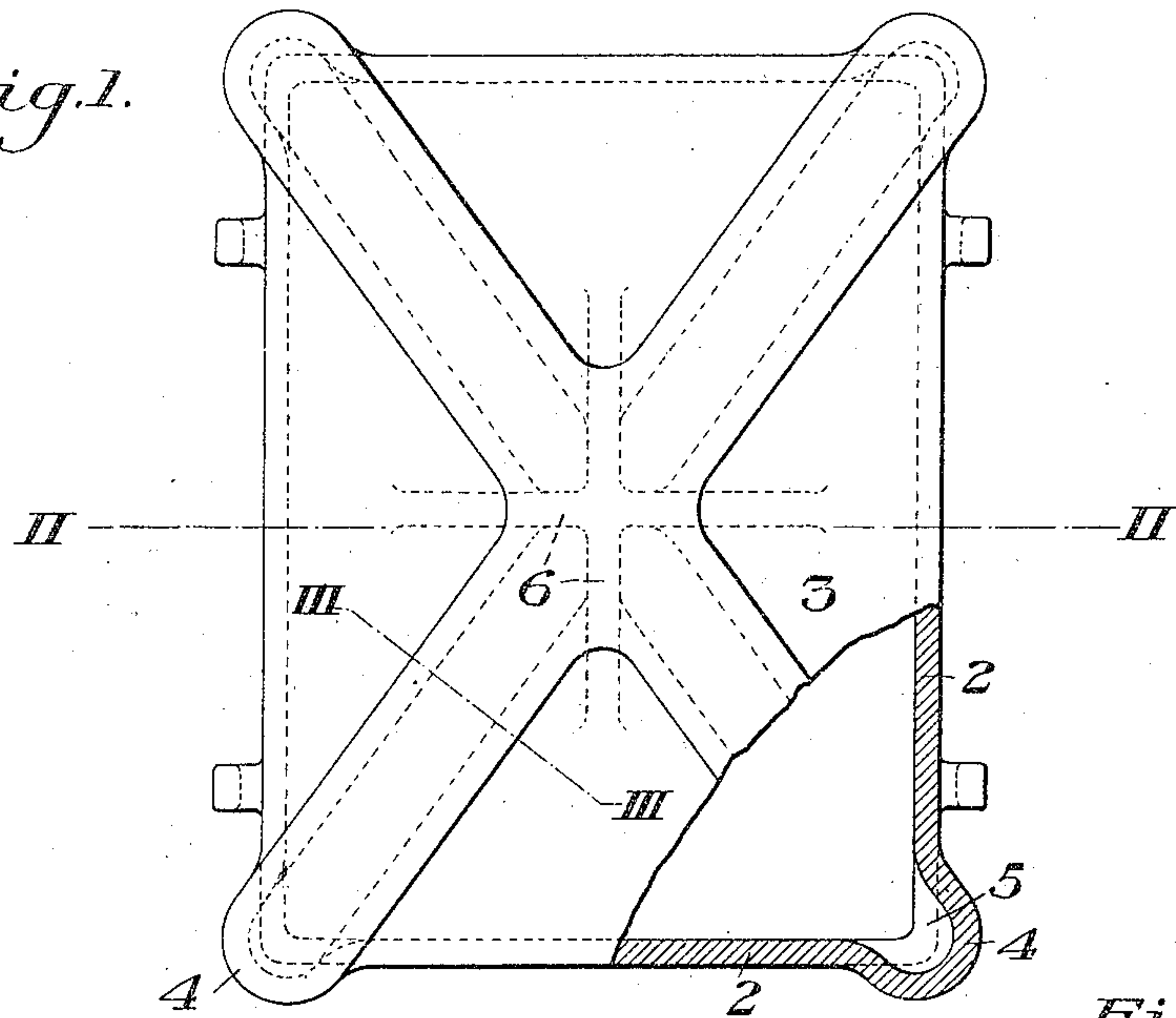


F. E. MESTA.  
ANNEALING BOX.  
APPLICATION FILED AUG. 2, 1909.

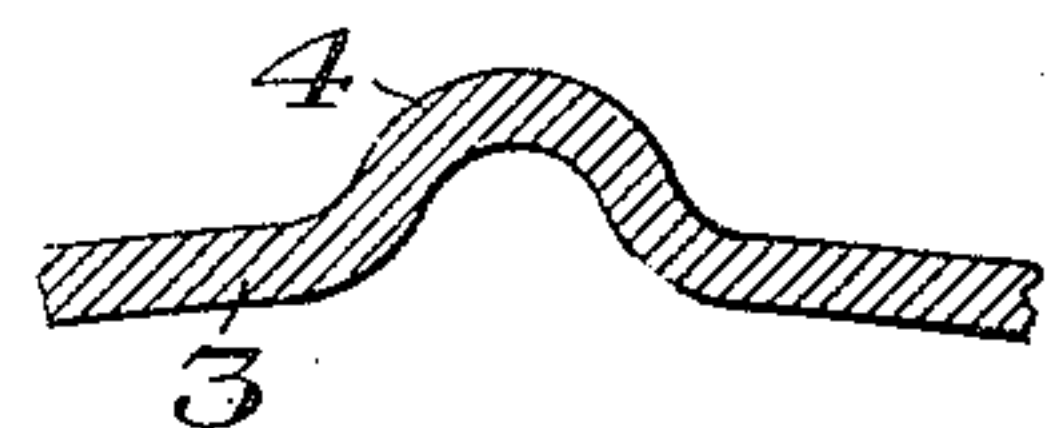
944,344.

Patented Dec. 28, 1909.

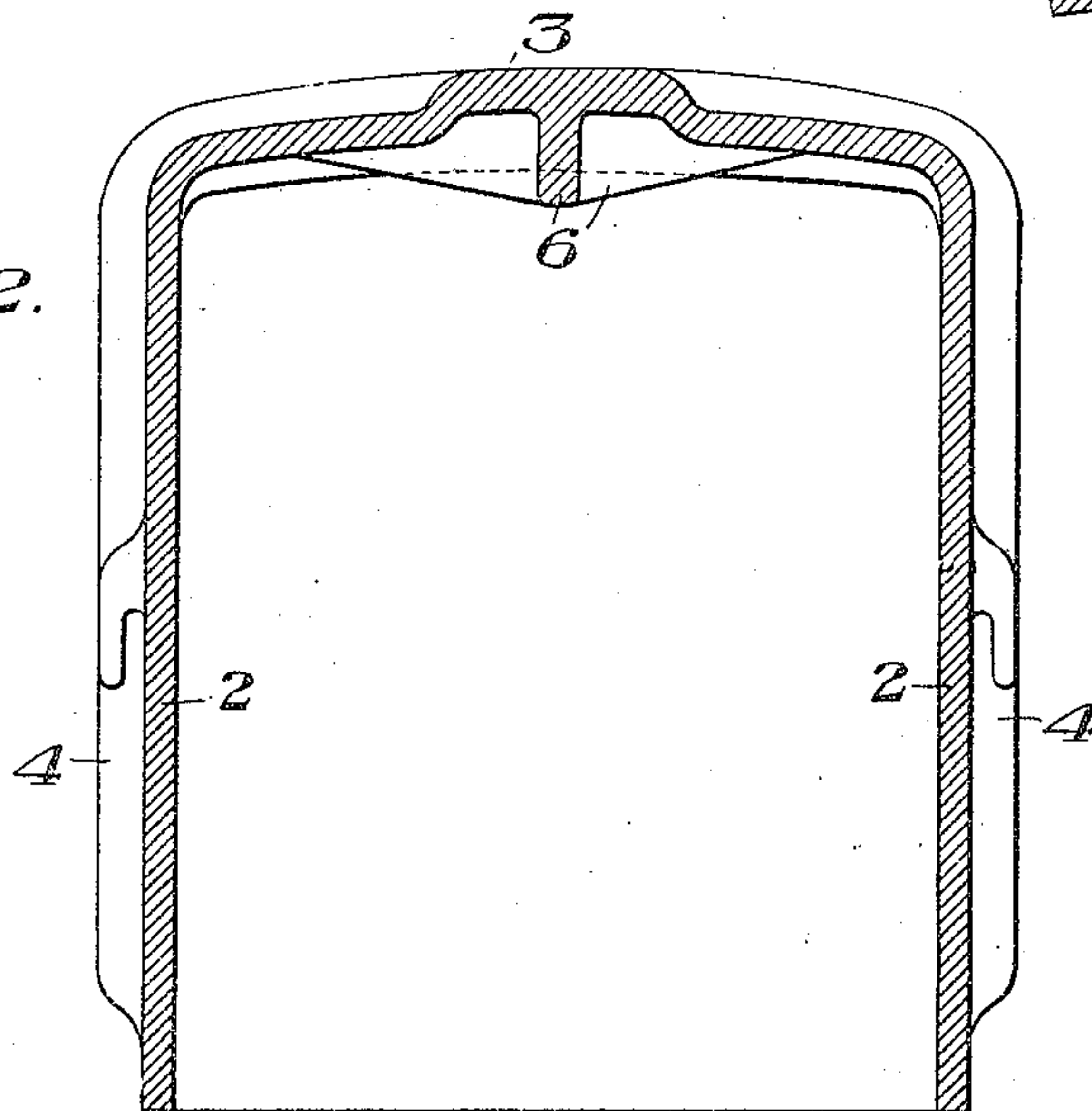
*Fig. 1.*



*Fig. 3.*



*Fig. 2.*



WITNESSES

*R. A. Balderson*  
*G. B. Blumling*

INVENTOR

*F. E. Mesta*  
*By Baker, Byrnes & Samuel*  
*his Atty*



# UNITED STATES PATENT OFFICE.

FREDRICK E. MESTA, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO MESTA MACHINE COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

## ANNEALING-BOX.

914,314.

Specification of Letters Patent. Patented Dec. 28, 1909.

Application filed August 2, 1909. Serial No. 510,693.

*To all whom it may concern:*

Be it known that I, FREDERICK E. MESTA, of Pittsburg, Allegheny county, Pennsylvania, have invented a new and useful Annealing-Box, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view, partially broken away, of an annealing box embodying my invention; Fig. 2 is a transverse section on the line II—II of Fig. 1; and Fig. 3 is a detail sectional view.

My invention has relation to annealing boxes, and more particularly to annealing boxes consisting of an integral casting.

The object of my invention is to provide a box of this type having means of novel and effective character which will enable it to withstand the severe heat to which it is subjected in service, and which will prevent it from giving away or collapsing.

The precise nature of my invention will be best understood by reference to the accompanying drawing, in which I have shown the preferred embodiment thereof, and which will now be described, it being premised, however, that various changes may be made in the details of the construction and arrangement of the parts without departing from the spirit and scope of my invention, as defined in the claims.

In these drawings, the numeral 2 designates the side and end walls of the box, and 3 the top or roof portion, which is preferably slightly arched. The box is provided at each of its four corners with a reinforcing swell or rib 4 of substantially the form shown in Figs. 1 and 3, said rib extending to the top or roof of the box and thence across the top of the box, the four ribs or swells being joined at the central portion of the top or roof, as shown in Fig. 1. The corner portions of the box are preferably cored out interiorly, as shown at 5, so that the metal of the projecting ribs or swells 4 will be of substantially uniform thickness with the side, end and roof walls of the box, thereby preventing the formation of strains in the casting. These ribs or swells are also cored or hollowed out on the under side, where they extend over the top or roof so as to be also of substantially uniform thickness throughout. I also preferably provide the top or roof of the box with the interior

trussing or reinforcing ribs 6, said ribs preferably having a cruciform arrangement, and having their greatest depth at the center and tapering out toward their ends, as shown in Fig. 2.

My invention is more especially adapted for annealing boxes of smaller sizes; and it will be readily understood by those skilled in the art that it provides a box having great strength and durability, the reinforcing ribs or swells greatly increasing the strength of the box at its corner portions, and also reinforcing and stiffening its top or roof against collapse.

I claim:—

1. An annealing box having integral side, end and top walls, the corner portions of said box having projecting ribs or swells; substantially as described.

2. An annealing box having integral side, end and top walls, the corner portions of said box having projecting ribs or swells, said ribs or swells being of a thickness of metal substantially uniform with the thickness of the metal in the walls of the box; substantially as described.

3. An annealing box having integral side, end and top walls, the corner portions of said box having projecting ribs or swells, said ribs or swells extending upwardly at the corners and obliquely across the top or roof; substantially as described.

4. An annealing box having integral side, end and top walls, the corner portions of said box having projecting ribs or swells, said ribs or swells extending upwardly at the corners and obliquely across the top or roof and being brought together and united at the central portion of the roof; substantially as described.

5. An annealing box having integral side, end and roof walls, and having its angles reinforced by exteriorly projecting hollow ribs or swells, said hollow ribs or swells also extending over the top of the box and united at the central portion thereof; substantially as described.

6. An annealing box having integral side, end and roof walls, the angles of the box being formed by outward swells or projections, and the roof of the box also having reinforcing swells or projections; substantially as described.

7. An annealing box having an integral top or roof provided with exterior stiffen-



ing ribs or projections extending obliquely from the four corners of the box to the central portion of the top or roof where they are united; substantially as described.

- 5 8. An annealing box having an integral top or roof provided with exterior stiffening ribs or projections extending obliquely from the four corners of the box to the central portion of the top or roof where they

are united, said top or roof also having interior reinforcing ribs or braces; substantially as described.

In testimony whereof, I have hereunto set my hand.

FREDRICK E. MESTA.

Witnesses:

G. E. TOWNSEND,  
J. B. CONNALLY.